CLAIMS

What is claimed is:

1. An apparatus for finding objects in a computer including a display and a pointing device with which a user drags a pointer on the display, comprising:

an input that receives an input signal to indicate a drag operation;

memory that stores a plurality of objects including enclosures in the memory, wherein enclosures comprise objects which may enclose other objects;

window opening logic, coupled with the display, that draws windows on the display corresponding to opened enclosures, wherein a window for an opened enclosure includes identifiers within the window corresponding to objects enclosed by the opened enclosure; and

temporary window logic, coupled to the display and the pointing device, that opens a temporary window for the particular enclosure to display identifiers within the temporary window corresponding to objects enclosed by the particular enclosure, in response to a drag during a drag operation of the pointer over an identifier corresponding to a particular enclosure.

2. The apparatus of claim 1, further including:

logic, coupled to the temporary window logic and to the pointing device that closes the temporary window, in response to a drag during the drag operation of the pointer outside the temporary window.

3. The apparatus of claim 1, further including:

logic that places a particular object into the particular enclosure, in response to a drag operation beginning from a position of a selected identifier corresponding to the particular object to another position within a temporary window.

4. The apparatus of claim 1, wherein the temporary window logic draws the temporary window on the display over the pointer.

5. The apparatus of claim 1, wherein the temporary window logic draws the temporary window on the display over the identifier corresponding to the particular enclosure.

6. The apparatus of claim 1, wherein the temporary window logic draws the temporary window on the display centered over the pointer.

7. The apparatus of claim 1, wherein the temporary window logic includes:

logic that determines whether the display includes an existing window for the particular enclosure during the drag operation to open a temporary window, and if so, then removes the existing window from the display.

8. The apparatus of claim 1, wherein the temporary window logic includes:

logic that determines whether the display includes an existing window for the particular enclosure during the drag operation to open a temporary window, and if so, then removes the existing window from the display; and

logic that draws the temporary window on the display over the identifier corresponding to the particular enclosure.

9. The apparatus of claim 8, wherein the temporary window logic further includes:

a routine that graphically indicates on the display a zoom of the existing window to the temporary window.

10. The apparatus of claim 8, further including:

logic, coupled to the temporary window logic and the pointing device that closes the temporary window, and redraws the existing window on the display, in response to a drag of the pointer outside the temporary window during a drag operation.

11. The apparatus of claim 1, wherein the temporary window logic includes:

logic, coupled to the display and the pointing device that enables a temporary window selector responsive to additional user input to cause the temporary window to be opened, in response to a drag during a drag operation of the pointer over an icon corresponding to a particular enclosure.

12. The apparatus of claim 11, wherein the temporary window selector includes a selector graphic over the identifier for the particular enclosure having a first side and a second side, and the additional user input includes drag of the pointer to the first side to open the temporary window.

13. The apparatus of claim 1, wherein identifiers for enclosures include a temporary window region and the temporary window logic includes:

logic, coupled to the display and the pointing device that causes the temporary window to be opened, in response to a drag during a drag operation of the pointer over the temporary window region of an identifier corresponding to a particular enclosure.

14. The apparatus of claim 1, wherein the temporary window logic includes:

logic that opens additional temporary windows as current temporary windows in response to a drag during the drag operation of the pointer over an identifier within current temporary windows.

15. The apparatus of claim 14, further including:

logic, coupled to the temporary window logic and to the pointing device that closes the additional temporary windows except for the current temporary window, in response to termination of the drag operation with the pointer inside the current temporary window.

16. The apparatus of claim 14, further including:

logic, coupled to the temporary window logic and to the pointing device, that after termination of the drag operation closes a particular temporary window opened during the drag operation in response to movement of the pointer out of the particular temporary window.

17. The apparatus of claim 14, further including:

logic, coupled to the temporary window logic and to the pointing device, that after termination of the drag operation closes temporary windows opened during the drag operation in response to movement of the pointer out of the temporary windows, except for particular temporary windows selected by user input before movement of the pointer out of the temporary windows.

18. An apparatus for finding objects within a hierarchy of enclosures in a computer including a display and a pointing device with which a user drags a pointer on the display, comprising:

memory to store a plurality of objects including at least one hierarchy of enclosures in the memory, wherein enclosures comprise objects which may enclose other objects;

window opening logic, coupled with the display, that draws windows on the display corresponding to opened enclosures, wherein a window for an opened enclosure includes identifiers within the window corresponding to objects enclosed by the opened enclosure;

an input to receive an input signal to indicate a drag operation;

temporary window opening logic, coupled to the display and the pointing device that opens a current

temporary window for a particular enclosure to display identifiers within the current temporary window corresponding to objects enclosed by the particular enclosure, in response to a drag during a drag operation of the pointer over an identifier corresponding to the particular enclosure, including logic that maintains a hierarchy of opened temporary windows and the current temporary window; and

temporary window closing logic, coupled to the temporary window opening logic and the pointing device, that closes the current temporary window in response to a drag during the drag operation of the pointer outside the current temporary window.

19. The apparatus of claim 18, wherein the temporary window closing logic includes logic that closes temporary windows in the hierarchy except the current temporary window, in response to a drag operation that ends in the current temporary window.

20. The apparatus of claim 18, wherein the temporary window closing logic includes logic that after termination of the drag operation closes a particular temporary window opened during the drag operation in response to movement of the pointer out of the particular temporary window.

21. The apparatus of claim 18, wherein the temporary window closing logic includes logic that after termination of the drag operation closes temporary windows opened during the drag operation in response to movement of the pointer out of the temporary windows, except for particular temporary windows selected by user input before movement of the pointer out of the temporary windows.

22. The apparatus of claim 18, further including:

logic that places a particular object into the particular enclosure, in response to a drag operation beginning from a position of a selected identifier corresponding to the particular object to another position within the current temporary window.

23. The apparatus of claim 18, wherein the temporary window opening logic draws the current temporary window on the display over the pointer.

24. The apparatus of claim 18, wherein the temporary window opening logic draws the current temporary window on the display over the identifier corresponding to the particular enclosure.

25. The apparatus of claim 18, wherein the temporary window opening logic draws the current temporary window on the display centered over the pointer.

26. The apparatus of claim 18, wherein the temporary window opening logic includes:

logic that determines whether the display includes an existing window for the particular enclosure during the drag operation to open a current temporary window, and if so, then removes the existing window from the display.

27. The apparatus of claim 18, wherein the temporary window opening logic includes:

logic that determines whether the display includes an existing window for the particular enclosure during the drag operation to open a current temporary window, and if so, then removes the existing window from the display; and

logic that draws the current temporary window on the display over the identifier corresponding to the particular enclosure.

28. The apparatus of claim 27, wherein the temporary window opening logic further includes:

logic that graphically indicates on the display a zoom of the existing window to the current temporary window.

29. The apparatus of claim 27, further including:

logic that redraws the existing window on the display when the temporary window in the hierarchy corresponding to the existing window is closed.

30. The apparatus of claim 18, wherein the temporary window opening logic includes:

logic, coupled to the display and the pointing device, that enables a temporary window selector responsive to additional user input to cause the current temporary window to be opened, in response to a drag during a drag operation of the pointer over an identifier corresponding to a particular enclosure.

31. The apparatus of claim 30, wherein the temporary window selector includes a selector graphic over the identifier for the particular enclosure having a first side and a second side, and the additional user input includes drag of the pointer to the first side to open the current temporary window.

32. The apparatus of claim 18, wherein identifiers for enclosures include a temporary window region and the temporary window opening logic includes:

logic, coupled to the display and the pointing device, that causes the current temporary window to be opened in response to a drag during a drag operation of the pointer over the temporary window region of an identifier corresponding to a particular enclosure.

33. An apparatus for copying or moving objects within a hierarchy of enclosures in a computer including a display and a pointing device with which a user drags a pointer on the display, comprising:

memory to store a plurality of objects including at least one hierarchy of enclosures in the memory, wherein enclosures comprise objects which may enclose other objects;

window opening logic, coupled with the display, that draws windows on the display corresponding to opened enclosures, wherein a window for an opened enclosure includes identifiers within the window corresponding to objects enclosed by the opened enclosure;

an input that receives an input signal to indicate a drag operation;

temporary window opening logic, coupled to the display and the pointing device, that opens a current temporary window for a particular enclosure to display identifiers within the current temporary window corresponding to objects enclosed by the particular enclosure, in response to a drag during a drag operation of the pointer over an identifier corresponding to the particular enclosure, including logic that maintains a hierarchy of opened temporary windows and the current temporary window;

temporary window closing logic, coupled to the temporary window opening logic and the pointing device, that closes the current temporary window in response to a drag during the drag operation of the pointer outside the current temporary window; and

object placing logic that places a particular object into the particular enclosure of the current temporary window in response to a drag operation beginning from a

position of a selected identifier corresponding to the particular object to another position within the current temporary window.

34. The apparatus of claim 33, wherein the temporary window closing logic includes logic that closes temporary windows in the hierarchy except the current temporary window, in response to a drag operation that ends in the current temporary window.

35. The apparatus of claim 33, wherein the temporary window closing logic includes logic that after termination of the drag operation closes a particular temporary window in the hierarchy opened during the drag operation in response to movement of the pointer out of the particular temporary window.

36. The apparatus of claim 33, wherein the temporary window closing logic includes logic that after termination of the drag operation closes temporary windows in the hierarchy opened during the drag operation in response to movement of the pointer out of the temporary windows, except for particular temporary windows selected by user input before movement of the pointer out of the temporary windows.

37. The apparatus of claim 33, wherein the temporary window opening logic draws the current temporary window on the display over the pointer.

38. The apparatus of claim 33, wherein the temporary window opening logic draws the current temporary window on the display over the identifier corresponding to the particular enclosure.

39. The apparatus of claim 33, wherein the temporary window opening logic draws the current temporary window on the display centered over the pointer.

40. The apparatus of claim 33, wherein the temporary window opening logic includes:

logic that determines whether the display includes an existing window for the particular enclosure during the drag operation to open a current temporary window, and if so, then removes the existing window from the display.

41. The apparatus of claim 33, wherein the temporary window opening logic includes:

logic that determines whether the display includes an existing window opened by the window opening logic for the particular enclosure during the drag operation to open a current temporary window, and if so, then removes the existing window from the display; and

logic that draws the current temporary window on the display over the identifier corresponding to the particular enclosure.

42. The apparatus of claim 41, wherein the temporary window opening logic further includes:

logic that graphically indicates on the display a zoom of the existing window to the current temporary window.

43. The apparatus of claim 41, further including:

logic that redraws the existing window on the display when the temporary window in the hierarchy corresponding to the existing window is closed.

44. The apparatus of claim 33, wherein the temporary window opening logic includes:

logic, coupled to the display and the pointing device, that enables a temporary window selector responsive to additional user input to cause the current temporary window to be opened, in response to a drag during a drag operation of the pointer over an identifier corresponding to a particular enclosure.

45. The apparatus of claim 44, wherein the temporary window selector includes a selector graphic over the identifier for the particular enclosure having a first side and a second side, and the additional user input includes drag of the pointer to the first side to open the current temporary window.

46. The apparatus of claim 33, wherein identifiers for enclosures include a temporary window region and temporary window opening logic includes:

logic, coupled to the display and the pointing device, that causes the current temporary window to be opened in response to a drag during a drag operation of the pointer over the temporary window region of an identifier corresponding to a particular enclosure.